

Appln. No.: 10/599,301
Reply to Office action of August 6, 2008

LISTING OF CLAIMS:

1-12(Cancelled).

13(Previously Presented). A piston ring having at least one operating surface, an upper face and a lower face, where the operating surface includes an HVOF-applied layering having a surface roughness factor $Rk<0.12\mu m$ and a porosity of < 5%, and wherein at least one of the upper and lower faces has a trapezoidal form adjacent said operating surface provided with a galvanic protective layer.

14(Previously Presented). The piston ring according to claim 13 wherein the layering has a surface roughness factor of $Rk<0.10\mu m$.

15(Previously Presented). The piston ring according to claim 13 wherein the layering has a surface roughness factor $Rk<0.08\mu m$.

16(Previously Presented). The piston ring according to claim 13 wherein the layering comprises carbide materials.

17(Previously Presented). The piston ring according to claim 13, wherein the layering is made of carbide materials selected from the group consisting of WC and/or TiC, and/or CrC.

18(Canceled).

19(Canceled).

20(Canceled).

21(Previously Presented). The piston ring according to claim 13 wherein the galvanic protective layer is chrome-based material applied on said trapezoidal form immediately adjacent said operating surface.

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22(Previously Presented). The piston ring according to claim 21 wherein the galvanic layer has a thickness between 1 μm and 20 μm .

23(Previously Presented). A method of making piston rings, including gathering a plurality of piston rings in a packet of such rings, exposing operating surfaces of the packet of rings to a HVOF process whereby a layering of thermal sprayed material is applied to the operating surfaces with a porosity < 5% and an upper surface roughness measured in an axial direction of Rk <0.10 μm ; forming at least part of an upper and lower surface of the individual rings adjacent said operating surface into a trapezoidal shape and applying a galvanic layer over the trapezoidal areas.

24(Canceled).

25(Previously Presented). The method of claim 23 wherein the galvanized layer has a thickness between 1 and 20 μm .